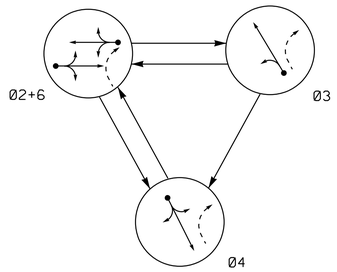
PROJECT REFERENCE NO.	SHEET NO.
U-4715B	Sig. 237.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

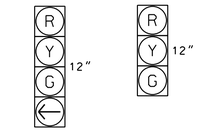
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø2+6	Ø3	Ø4	FLASH
21,22	G	R	R	Y
31	R	G	R	R
32	R	G	R	R
41	R	R	G	R
42	R	R	G	R
61,62	G	R	R	Y

SIGNAL FACE I.D.

All Heads L.E.D.



31
41
(See Note 11)

21,22
32
42
61,62

OASIS 2070E LOOP & DETECTOR INSTALLATION CHART

INDUCTIVE LOOPS					DETECTOR PROGRAMMING						
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
2A	EXIST	0	2-4-2	-	2	Y	Y	-	-	-	-	Y
3A	EXIST	+25+/-	2-4-2	-	3	Y	Y	-	-	3	-	Y
4A	EXIST	0	2-4-2	-	4	Y	Y	-	-	5	-	Y
6A	EXIST	+10+/-	2-4-2	-	6	Y	Y	-	-	-	-	Y

OASIS 2070E TIMING CHART

FEATURE	PHASE 2	3	4	6
Min Green 1 *	10	7	7	10
Extension 1 *	2.0	3.0	3.0	2.0
Max Green 1 *	30	30	30	30
Yellow Clearance	3.9	4.0	3.5	3.4
Red Clearance	1.9	2.8	3.1	2.3
Red Revert	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-
Don't Walk 1	-	-	-	-
Seconds Per Actuation *	-	-	-	-
Max Variable Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduce *	-	-	-	-
Minimum Gap	-	-	-	-
Recall Mode	MIN RECALL	-	-	MIN RECALL
Vehicle Call Memory	YELLOW	-	-	YELLOW
Dual Entry	-	-	-	-
Simultaneous Gap	ON	ON	ON	ON

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

3 Phase Fully-Actuated (Asheville Signal System)

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Set all detector units to presence mode.
4. In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
6. Pavement markings are existing.
7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
8. Locate new cabinet next to existing cabinet location on new foundation. Provide a pedestal mounted meter and disconnect.
9. The order of phase 3 and phase 4 may be reversed.
10. Yellow and Red Clearance intervals for phases 2,3,4, and 6 may be decreased by 0.2 seconds per week until the required value is reached.
11. City of Asheville to verify minimum of 15'-6" clearance is available.

LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
	Metal Pole with Mastarm	

Signal Upgrade

Prepared for the Offices of:
CITY OF ASHEVILLE NORTH CAROLINA
161 S. Charlotte St. Asheville NC 28802

Deaverview Rd. at N Bear Creek Rd.

Division 13 Buncombe County Asheville

PLAN DATE:	JUNE 2016	REVIEWED BY:	SMH
PREPARED BY:	BGR	REVIEWED BY:	JBV

REVISIONS	INIT.	DATE

SCALE 0 30 1"=30'

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 022599 ENGINEER JAMES B. VOSO
Docusigned by: James Voso 140FD0037BE041F...
12/13/2016
SIGNATURE DATE
SIG. INVENTORY NO. COA-0001

Mattern & Craig
SINCE 1976
CONSULTING ENGINEERS • SURVEYORS
FIRM LICENSE No. C-1154
12 BROAD STREET
ASHEVILLE, NORTH CAROLINA 28801
(828) 254-2201
FAX (828) 254-4562

10:48:38 AM
R:\4602_Asheville Signal System\DGN\COA-0001*COA-0001_sig_dsn.dgn
bgross